

Challenging The Myth
Bus patronage versus motor car use; implications
for subsidy policies and Metro pricing.

SUBMISSION

to the

GOVERNMENT PRICES OVERSIGHT COMMISSION

METRO FARES INVESTIGATION 2003

by

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Introduction.

The belief that public transport is a poor person's alternative to private motor vehicle use is widely held. In its "Preliminary Submission" to the GPOC 2003 review of Metro pricing policies, Metro Tasmania repeats the belief, either explicitly or implicitly, on several occasions.

For example, in section 3.7.3, "Income Elasticity", Metro states:

"In relation to the private car, public transport must be considered as an 'inferior good', similar to the relationship between prime steak and cheap mince: as incomes rise people purchase less of the inferior good and more of the superior good."

Again, in section 3.11 "Trends In Use Of Buses For Commuting", Metro's submission says:

"The very low utilisation of the bus for the journey-to-work is another reflection of public transport being seen as an 'inferior good' in relation to the private car."

The same belief underlies the government's policy of subsidising Metro's operations under the Community Service Activity (CSA) scheme. It is argued that since people need mobility, governments should ensure poor people have access to affordable public transport by subsidising its costs of operation.

As a transport economist and a lecturer in the School of Geography and Environmental Studies at the University of Tasmania with a long interest in urban geography and transport issues I wish to argue in this submission that the "inferior good" belief is a myth and that the choice between private transport and public transport is instead due to the changing nature of employment, land use and daily activity patterns.

The changing nature of employment, land use and activity patterns.

Employment change.

Employment patterns have changed radically in recent decades, in accordance with a general cultural shift from a declining industrial age to an emerging post-industrial age.

In the industrial age a predominantly male workforce engaged in regular, routine journeys to and from work, mainly to large centralised employment centres; factories, offices and transport facilities. Working hours were generally fixed, with most workers clocking in to their place of work and staying there until it was time to clock off again late in the afternoon.

Photographs of Hobart taken as late as the 1950s, for example, those in Ian Cooper's excellent book Hobart's Tramways (1993, Transit Australia Publishing, Sydney), show almost empty streetscapes during working hours.

Post-industrial employment, on the other hand, is characterised by a shift from manufacturing to a burgeoning array of services; business services, legal services, financial services, educational services, medical services, personal services, recreational services and hospitality services.

Service employment is gender neutral and has led to the entry of large numbers of women into the workforce, especially mothers with dependent children. Women now have participation rates almost equal those of men.

Another feature of post-industrial employment change is the increasing trend towards flexible working hours and part-time work.

Figure 1 shows the quite remarkable transformation of the Tasmanian workforce in the 25-year period from the 1971 Census to the 1996 Census, especially the shift to service employment and the growth of female employment.

TASMANIAN EMPLOYED LABOUR FORCE, 1971-96

[Source: Australian Bureau of Statistics, 1971 and 1996 Census Data]

Figure 1

Industry Group	Males			Females		
	1971	1996	change '71-'96	1971	1996	change '71-'96
<i>Agriculture, Forestry, Fishing and Mining</i>	16469	10484	- 5985	1882	3302	+ 1420
<i>Manufacturing</i>	25313	16783	- 8530	6219	5456	- 763
<i>Electricity, Gas, Water, and Construction</i>	15891	10217	- 5674	708	1333	+ 625
<i>Wholesale and retail services</i>	16522	18335	+ 1813	10594	15048	+ 4454
<i>Transport, Storage and Communications</i>	9362	7466	- 1896	1470	2262	+ 792
<i>Finance, Property and Business Services</i>	4537	8834	+ 4297	3285	8478	+ 5193
<i>Govt Administration and Defence</i>	4987	6879	+ 1892	2223	5066	+ 2843
<i>Community, Health and Education Services</i>	6516	9373	+ 2857	11244	24935	+ 13691
<i>Recreation, Personal and Hospitality Services</i>	2904	9238	+ 6334	4713	10799	+ 6086
<i>Other and not stated</i>	3686	4581	+ 895	1690	3343	+ 1653
<i>Employed labour force</i>	106187	102190	- 3997	44028	80022	+ 35994
<i>Unemployed labour force</i>	1786	14310	+ 12524	1261	8153	+ 6892
<i>Labour force</i>	107973	116500	+ 8527	45289	88175	+ 42886
<i>Not in labour force</i>	88469	109838	+ 21369	148682	145146	- 3536

<i>Total population</i>	196442	226338	+ 29896	193971	233321	+ 39350
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The production of services requires more frequent person to person communication. It therefore generates a higher level of work-related urban travel as service providers and consumers travel to meet face to face. Combined with the shift to more flexible working hours and part-time work this results in more travel during the day and a lessening of the relative importance of peak-hour traffic.

Land use change.

Land use patterns have changed significantly in recent years, partly as a result of employment changes but predominantly because of the effect of increasing motor vehicle use.

The mobility and flexibility of the truck has enabled manufacturing, retail and office establishments to re-locate away from crowded downtown areas to cheaper and more spacious sites in the suburbs. Manufacturing, in particular, is now mainly established in fringe and outer-suburban industrial estates. The CBD's share of retail and office employment has declined due to the growth of suburban ("regional") shopping and office malls.

Greater car ownership means that relocated businesses are still readily accessible not only to their suppliers and workforce, but to their customers as well. The net effect is that the predominantly linear and CBD-focussed land use pattern of the industrial era has been transformed to a more decentralised, lower-density spread in the emerging post-industrial city.

Activity patterns.

Another feature of the post-industrial culture is the growth of linked activities (or so-called "trip chains"). The simple journeys to and from work (or shop or school) of the industrial age are giving way to more complex journeys as people attempt to fit a broader range of activities into the constraints of a limited time budget.

A young employed mother, for example, may deliver her children to school or childcare on the way to work, attend to personal business during her lunch hour,

and take time on her way home to either shop, visit friends, or go to the gymnasium, and yet still be home in time to cook the evening meal.

These different activities may require her to visit several spatially separated sites within a relatively short period of time. She can only do this if she has a car at her disposal. If she were to become dependent on the inflexibility of public transport, confined as it is to routes and timetables, she would have to curtail her activity patterns, perhaps even to the point of giving up her job. Her life would be considerably poorer as a result.

Idiosyncratic case examples.

To illustrate the above argument I have constructed ten idiosyncratic case studies (see Box). Although hypothetical, the ten examples are representative of actual activity patterns and help explain the limitations of public transport in meeting people's changing urban travel needs.

I have deliberately used individual cases because urban travel decisions are typically made at the personal level. Each person knows their own obligatory and discretionary behaviour. Each person knows what they have to do that day as well as the optional activities they would like to do if they had time. Each person is their own best judge as to what mode of travel they should use to organise their activities.

Advocates of public transport tend to ignore or avoid individual case studies. They tend to focus on the aggregate mass and blindly assume that activity patterns could just as easily be done by public transport as by car. They often assume that people are selfish, or foolish, or lazy in preferring cars rather than buses. They tend to talk about transport vehicles, rather than travel modes, and to talk about structures and volumes, rather than activities and people. They need to be reminded that people are not parcels, to be transported from one part of the city to another. Rather, each person has a set of activities that they prioritise according to their own preferences and in regard to their own particular time-space budgets.

Hypothetical idiosyncratic case examples.

Case 1:

Anne lives at Lachlan, where she and her partner run a hobby farm. Anne works in Glenorchy and uses her car to travel to and from work each day. She lives outside Metro's area of operation.

Case 2:

Betty lives in Glenorchy with her husband and two teenaged children. She works as a clerk in a legal office in the Hobart CBD. Most days she catches the Metro bus to and from work. However, on days when she arranges to meet old school friends, or has other after-work commitments, she takes her car, despite the relatively high costs of parking near her office. Betty finds that as her children grow up and she attains seniority at work, the frequency of taking her car increases.

Case 3:

Betty's neighbour, **Catherine**, also is married, but with three young children aged 7, 10 and 12. She has an elderly mother-in-law who lives in Goodwood and who needs Catherine's help on a daily basis. To earn money, Catherine works part-time in a sandwich bar in Moonah. Although there is a bus-stop outside her house as well as one outside her place of work, Catherine's busy daily schedule of getting her husband and children off to work, attending to her mother-in-law's needs, doing the household shopping, getting herself to work, and being home in time to cook the evening meal, means she is "car dependent". Without her trusty second hand car she would not be able to work.

Case 4:

Across the road from Catherine's house live a pensioner couple, **Doug** and **Evie**. Doug is an invalid pensioner and requires medical treatment on three days each week. Because of the irregular hours and varying length of each medical appointment, Doug relies on taxis to get him to and from the medical centre. Taxi fares represent a large component of Doug and Evie's pension income.

Case 5:

Evie, Doug's long suffering wife, enjoys good health but spends most of her time at home, tending the garden, watching television and being on call for Doug's needs. Once a week or so she takes

advantage of cheap bus fares to visit the shops at Northgate or to play bingo at a social club.

Case 6:

Fred, who lives next-door to Doug and Evie, is also a pensioner and an ex-World War 2 digger. Despite his age, Fred is sprightly and lives an active life. Although he is entitled to subsidised bus fares he prefers to exercise by walking the 800 metres or so to the shopping centre to buy his daily newspaper and to meet and chat with friends and acquaintances.

Case 7:

Graham is a schoolteacher living in West Hobart. He recently changed jobs to a new campus on the eastern shore. Because of the difficulties of cross-city bus connections and his busy but erratic after-school activities he always takes his car to and from work.

Case 8:

Helen, who used to live in Taroona and caught the bus each day to her work in the government office centre in Murray Street, has now moved to a new house at Margate. She and her husband decided they needed more space for a growing family, now that their daughter is nearly two and Helen is pregnant again. Helen has kept her job and commutes by car each day, stopping on the way to drop her daughter off at childcare and collecting her again after work. Despite her young family she is able to maintain full-time employment thanks to the government's flexible working hours scheme.

Case 9:

Helen's father, **Ian**, still lives in the family house in Taroona and catches the bus to and from work each day to his job with a city bank. Although Ian is a senior accountant and earns a high salary he has a simple daily activity pattern and finds the bus a convenient means of travel.

Case 10:

Ian's wife, **Jenny**, has not worked since she and Ian started their family thirty years ago. Jenny never travels by bus and always uses the family car for her busy weekly schedule of playing golf, shopping and visiting friends.

Implications for realistic transport options.

The combined effect of changes in employment, land use, and activity patterns explains why public transport patronage has been declining, and why its future role will continue to be limited.

Public transport systems were developed during the industrial age as an alternative to horse-drawn transport and walking. They were ideally suited to, and in turn contributed to, industrial age employment patterns and land use structures.

In contrast, rising car ownership for passenger travel and the increasing use of trucks for freight movements are intimately related to the urban travel patterns of the emerging post-industrial era. Motor vehicle use contributes to, and reflects, changing employment, land use and activity patterns. Thus, public transport and private transport serve different markets. The overlap between them, where people have a genuine choice of either one or the other, represents only a small and declining proportion of urban travel.

Car ownership is now so widespread that only those too young to drive (school children) or those who for various reasons are unable to drive are denied the welfare enhancing benefits that private motorised transport offers.

Car ownership is no longer the privilege of the wealthy. Income levels may determine the type of car purchased but not whether or not to buy one.

As the idiosyncratic case studies show, the choice between car and bus is largely independent of income. Decisions concerning mode of travel relate more to where people live, where they work, and the complexity of their daily activity patterns.

Anne, like tens of thousands of other Tasmanians, lives outside Metro bus service areas and has no realistic choice other than the car.

Betty can and does use buses but, because of linked after-work activities, increasingly prefers to use her car.

Catherine's busy schedule, combining work with family obligations including her children and an elderly mother-in-law, makes her car dependent, despite living and working on a bus route. For her bus services may as well not exist.

Doug, Evie, and Fred are all retired pensioners with no busy daily schedules to organise. Nevertheless, they rarely use buses. Doug's regular medical appointments make him dependent on expensive taxis, while his wife Evie is mostly housebound. Fred could use buses, but prefers the exercise of walking.

For **Graham**, because of his cross-town activity patterns, Metro services are of no practical use. If his car should break down, he would most likely catch taxis or arrange a lift with friends.

Helen, a working mother with a young daughter, has a busy daily schedule that can only be serviced by car, if she wants to remain in the workforce. Again, bus services are of no use to her.

Ian, because of his simple activity pattern, uses buses as a preferred option, despite earning a high salary. His wife, **Jenny**, on the other hand, eschews buses in favour of the car for her varied and irregular social activities.

The "separate market" argument regarding car and bus travel is supported by evidence from Metro's "Preliminary Submission". In Section 3.7.3 and Section 3.7.4 the submission acknowledges, respectively:

"... in economic decline fewer people travel on buses, rather than switching from cars to buses as is commonly assumed."

"... the elasticity of petrol price has been estimated as plus 0.14 ... which, although positive, is very unresponsive."

Metro attributes these effects to the "inferior good" argument rather than, as I have argued above, to changes in employment, land use and activity patterns.

Metro's "inferior good" argument leads it to the somewhat chauvinistic conclusion (Section 3.11):

(The shift away from public transport for the journey-to work) "... has been assisted by the introduction and promotion of inexpensive small cars, which are attractive to young women who previously used public transport."

Many busy working mothers would resent the suggestion that their commitment to car travel is based on the successful promotion of “inexpensive small cars”.

Implications for the government’s CSA subsidy policy and its method of delivery.

If government subsidies to Metro under the CSA scheme are intended to assist low-income people and other mobility impaired sections of the community to have affordable travel options, then it could be argued that the policy has failed.

As the hypothetical case studies show, for people who live outside Metro’s area of operations (**Anne**), or have complex activity patterns (**Catherine** and **Helen**), or who work cross-town (**Graham**), or who have special needs (**Doug**), Metro services are of no practical use, regardless of their income or need for mobility.

People who have low mobility levels (**Evie**), or who prefer walking (**Fred**), or who find that the car better suits their needs (**Betty** and **Jenny**) are also unlikely to catch buses, except on rare occasions.

Only **Ian**, a high-income earner, has the daily choice of either bus or car. His choice of bus is unlikely to be significantly affected by the level of CSA subsidy. Like many other commuters who work in the city centre and find car parking and congestion a hassle, Ian is likely to continue catching the bus even at full cost recovery fare levels.

Disregarding the separate issue of transporting children to and from school, the granting of government subsidies for Metro’s public transport operations can be said to be misguided and inequitable. Only a small (and declining) proportion of the Tasmanian population is able to take advantage of the subsidy assistance. Those who deserve assistance generally don’t get it, and those who receive it often don’t deserve it.

A further problem with the CSA scheme is its method of delivery. Subsidies intended to assist those in need of transport services are given to the provider of those services, Metro, rather than to the recipients themselves. To use Metro’s example of comparing prime steak with cheap mince, the CSA subsidy is akin to the government undertaking a community service obligation by subsidising butchers for the amount of cheap mince they sold, regardless of people’s dietary preferences and the incomes of those who bought it.

Subsidies should be given directly to those who need assistance, in cash. People would then have a choice as to how to spend that assistance, according to their own best interests. In the hypothetical case studies presented above, Fred doesn’t receive a subsidy because he chooses to walk. If, instead, he caught the bus he would receive a subsidised fare, but would probably become less healthy. Society loses.

Implications for Metro’s structure and pricing policies.

The limited availability and inequitable nature of the CSA subsidy scheme suggests that Metro’s structure and pricing policies need urgent and radical revision. Below are three alternatives to the present Metro structure.

Scenario 1: Complete subsidisation; zero fares.

Given the relatively small proportion of Metro's income derived from the fare box and the relatively high cost of collecting fares (soon to incur the additional cost of converting to a new ticketing system), one possible scenario would be to abolish fares altogether and allow all patrons to travel free of charge on all services.

This would encourage greater bus travel and speedier boarding and alighting times. Benefits include more passengers and higher levels of service.

The disadvantage, given the small and declining market for bus travel, is that it would exacerbate the inequities of the subsidy entitlements. The minority of people who have an effective choice of using buses, regardless of their need, would receive an additional handout at the expense of taxpayers or other publicly funded services.

Scenario 2: Devolution of control from State to Local government.

Metro's main function is to provide a commuter bus service to and from centralised workplaces for people living in the suburbs of our major cities. Metro's limited area of operation suggests that the responsibility for providing urban bus services could be devolved from the State government to the City Councils of Hobart, Glenorchy, Clarence, Launceston, Devonport and Burnie, plus any other local government authority that wanted to be involved.

Each local authority would then be responsible to its ratepayers in regard to the level of service (such as routes, timetables, and number and type of vehicles) and the method of cost recovery. Some Councils may wish to provide complete subsidisation (by ratepayers), others may wish to have a combination of subsidies and fares, while others may wish the service to be paid entirely by passengers.

Prior to Council elections, candidates should be asked to indicate their preferences for the various cost recovery options.

The integration of services between different local government authorities could easily be achieved by the formation of an inter-LGA management committee. In any case since, in Hobart, most travel demands are to and from the CBD, cross-LGA services would not represent a major logistical problem.

Under this scenario, the State government, if it wanted, could still make welfare payments to those considered deserving of assistance, irrespective of contributions made by ratepayers. However, unless government assistance was made to all those in need of transport assistance, not just those able to take advantage of Metro services, the inequity of the CSA scheme would remain.

Scenario 3: Full cost recovery fares; zero subsidisation.

The preferred scenario for restructuring Metro's operations would be to abolish the CSA subsidy scheme altogether and to either fully privatise Metro or allow it to operate as a full cost recovery GBE.

As argued above, there are three major problems with the CSA scheme:

- (a) it is inequitable in that it applies only to the small and declining proportion of people who have realistic access to Metro services,
- (b) it is paid to passengers, through reduced fares, regardless of their need for transport assistance, and,
- (c) it is inefficient in that it is given indirectly to the operator rather than directly to the recipient.

Amongst other distortions to market signals, the CSA subsidy paid to Metro contributes to the anomalies between the fares paid by students on Metro services and those paid by students travelling with private operators.

Removing the CSA subsidy would not prevent the State government from assisting those in need of improved transport mobility. However, such assistance should be available to all those who need it, not just to those having access to Metro services.

Assistance should be given directly to the targeted recipients, preferably in cash rather than in kind, to enable them to determine their own best alternatives, rather than indirectly to transport operators.

Requiring Metro (or other private bus operators) to operate at full cost recovery fares would not mean that bus services would disappear or be reduced to near zero levels. There is a continuing demand for bus services, particularly for commuter travel, that is relatively price inelastic.

The hypothetical case example of **Ian** is typical of a large number of bus passengers whose use of buses is a preferred choice because it suits their lifestyles. Such people typically have simple daily activity patterns, essentially going to and from work with very little extra activities. Buses are their preferred mode of transport because of the costs and inconvenience of alternative modes. Cycling may be too enervating or too slow, parking charges for cars may be too expensive, driving in city traffic may be too much of a hassle, and so on. Just as there are people for whom bus travel will never be a feasible option, so too there are people for whom buses would always be their preferred travel option.

A privatised Metro would introduce greater sensitivity into fare structures; higher fares during peak-hour to capture commuters' willingness to pay for bus travel, and reduced off-peak fares to encourage greater off-peak travel. It would pay more attention to customers' preferences for the style, size and comfort of buses, and be more responsible in its promotion and marketing activities.

I thank the GPOC Commissioners for the opportunity to present this submission.

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